



# UNIVERSITY OF MISSOURI **EXTENSION**

#### **VICE CHANCELLOR'S OFFICE**

108 Whitten Hall Columbia, MO 65211

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December 4, 2017

Dear County Commissioners and Friends of MU Extension:

For much of the past year, MU Extension was focused on a long-overdue assessment of statewide needs and a deep look at how we respond to these needs with programs and resources.

We crisscrossed the state to gather input from 42 community conversations with 1,200 people and reviewed analysis and recommendations from a range of external experts. As a result, MU Extension is working on a variety of changes in the interest of providing better university engagement with your communities.

We are steadfast in our resolve to help local communities and the state meet grand challenges associated with economic opportunity, educational excellence and healthy futures. These challenges reflect what Missourians from every corner of the state told us they were most concerned about.

As you read your county's annual MU Extension report, I believe you will be pleased to see the results that have been accomplished through county-based University of Missouri faculty. These faculty members work in response to input received from local extension councils.

At the state level, local MU Extension efforts really add up. Though we have long known extension funds were leveraged, an independent review revealed that MU Extension created more than \$945 million dollars of public value from the \$80 million it received from federal, state, county, grant and contract partners. A public value ratio exceeding 11:1 even surprised us.

As we go about implementing changes based on the recently completed needs assessment and review of our organization, I am confident that our ability to create value at the local level will be even greater.

I encourage you to read the attached annual report from your MU Extension county center to gain an understanding of how MU Extension has worked this past year to serve your community.

Your support of MU Extension and your efforts in your community is greatly appreciated. As always, I welcome input on how the University of Missouri can better serve your community and its people.

Sincerely,

Marshall Stewart, Ed.D.

Vice Chancellor for Extension and Engagement

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### Who we are

#### **Bates County Extension Council**

Jerry Ferguson, chair

Mary Fischer, vice chair

Kay Wetter, secretary

Wesley Merritt, treasurer

Tyler Black

Shannon Crawford

Paul Cumpton

Kellie Davidson

Larry Hacker

**Dolly Robey** 

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# 2017 Bates County University of Missouri Extension Council operating budget

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2017 Budget:	\$59,875	
Salary and Wages, Of	fice Mgr.	30,180
FICA and Insurance		12,075
Salary and Wages 4H		1,000
Travel		6,600
Postage		1,200
Telephone, local		1,800
Network fees		600
Telephone, toll		400
Publishing, printing		1,800
Supplies/services		2,300
Insurance (office)		520
Misc.		400
Furniture/equipment		1,000
Total Expenses		\$59,875

# Bates County faculty and staff

#### **Tammy Roberts**

County Program Director; Nutrition and Health Education Specialist

#### **Doug Scotten**

Agriculture Business Specialist

#### Robyn Eckhoff

4-H Youth Program Associate

#### **Amanda Ast**

Food and Nutrition Program Assistant

#### Staff serving Bates County, (based in other counties)

#### **David Hoffman**

Livestock Specialist

#### Pat Miller

Agronomy Specialist

#### **Landon Sullivan**

4-H Youth Specialist

#### **Dedra Thomas**

Family Financial Educator

#### Michelle Kroll

Community Development Specialist

#### Kelly Asbury Amy Jackson

### Kori Faulconer

**Business Development** 

#### **James Crawford**

Natural Resource Engineering Specialist

# Bates County Commissioners

#### Jim Wheatley

**Presiding Commissioner** 

#### **Alvin Griffin**

Northern Commissioner

#### Larry Hacker

Southern Commissioner

#### State legislators

#### Patricia Pike

Missouri Representative— District 126

#### Wanda Brown

Missouri Representative— District 57

#### Jack Bondon

Missouri Representative— District 56

#### Ed Emery

Missouri Senator—Missouri 31st Senatorial District

#### About us

#### Location:

Bates County Courthouse 1 N. Delaware Butler, MO 64730

#### Hours:

8:30 am - 4:30 pm

#### Contact info:

660.679.4167

## **4-H Youth Development**

Robyn Eckhoff, 4-H Youth Program Associate

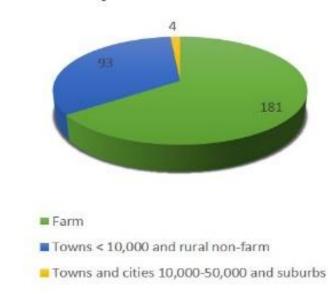
4-H is America's largest youth development organization, with nearly six million young people enrolled across the U.S. We believe in the power of young people and work to provide experiences where 4-Hers learn by doing. Members complete hands-on projects in areas related to citizenship, healthy living, agriculture, and science/technology.



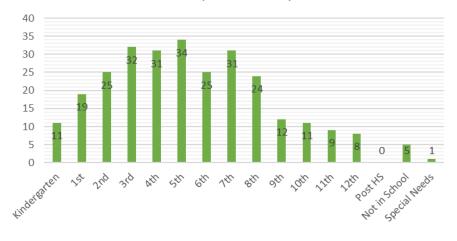
Number of Bates County residents served

Bates County serves 278 4-H members, 134 males and 144 females. Of this enrollment, 181 members live on farms; 93 live in towns under 10,000. The largest amount of participation in 4-H are those members ranging from 2<sup>nd</sup> grade through 8<sup>th</sup> grade.

## 4-H Participants Place of Residency



## 4-H Participation by Grade



The 4-H members are served by 166 adult and youth volunteers.

# Total Regional, State, and National Event Participation in 2017

#### Regional, State and National 4-H Attendance:

West Central Regional Energizer—1 member

Teen Conference—2 members

State Fashion Review—4 members; 1 Division winner

State Fair Demonstrations—7 members

State Meats Judging—3 members

State Livestock Judging—8 members; 1st place individual winner

State Shooting Sports—55 members; 3rd place individual winner in Archery

State Western Heritage and Cowboy Shooting—2 members

National Western Heritage and Cowboy Shooting—2 members

State Robotics Challenge—3 members; 1st place team

4-H Camp—10 members

Ozark Empire Fair Exhibit—159 exhibits

Missouri State Fair Exhibits—117 exhibits

Youth Service to Communities—7 4-H Clubs



#### What Did They Learn?

Bates County's eleven 4-H clubs offer long-term educational experiences in which members learn life skills such as decision making, public speaking and working with others. Members learn by doing under the guidance of adult volunteers, who teach projects ranging from aerospace and arts to sport fishing and veterinary science. Clubs also involve children and teens in community service, leadership, and educational trips.

#### What Action Did They Take?

4-H youth are equipped with the knowledge, skills, attitudes and health for the 21st century workforce. 4-H youth are engaged in programs anchored in science (Arnold, Bourdeau, & Nott, 2013).

A study from Tufts University reports that young people in "4-H far outperform their non-4-H peers" in developing the skills, leadership and interest in science and science careers that drive our nation's future. In fact, 4-H'ers are more likely to pursue careers related to science, engineering and technology because they spend more time engaging in science programs (Lerner & Lerner, 2011). It is not surprising that 4-H youth are three times more likely to go into science related careers than similar peers (Lerner & Lerner, 2008).

MU Extension 4-H connects 5,176 young people to University of Missouri campuses. Being on campus is a predictor of youth going onto higher education (Dalton & St. John, 2016). 4-H youth are nearly twice as likely to go to college compared to their non 4-H peers (Lerner & Lerner, 2011).

Volunteers create, support and are part of the 4-H community. Missouri 4-H volunteers responding to a survey report they contribute on average 100 hours per year. Valuing their time at \$24.14 per hour (Independent Sector, 2017), the contribution of Bates County 4-H volunteers was worth more than \$400,724 in 2017. More importantly, these individuals serve as role models and mentors for youth helping them transition into adulthood.

# How Does This Work Make Bates County and Missouri Better?

The U.S. needs young people prepared to live and work in a world that no one can imagine – jobs that do not yet exist, using technology that has not been invented, solving problems that have not yet been identified. In Bates County, 185 4-H members were engaged in science-related projects and experiences.

Youth who earn a earn bachelor's degree increase annual earnings by \$2 million over their lifetime (NACUBO, 2012). If 50% of the Bates County youth participating in 4-H events on a college campus receive a Bachelor's degree, 4-H would help young people acquire \$30 million more of lifetime earnings. (30 youth X 0.50 X @\$2,000,000 = \$30 million.)

#### References:

Arnold, M., Bourdeau, V., & Nott, B. (2013). Measuring science inquiry skills in youth development programs: The Science Process Skills Inventory, *Journal of Youth Development*, 8(1).

Dalton, R., & St. John, E. (2016). College for every student: A practitioner's guide to building college and career readiness. New York, NY: Routledge.

Independent Sector (2017). Independent sector releases new value of volunteer time of \$24.14 per hour. Retrieved from <a href="http://independentsector.org/news-post/value-volunteer-time/">http://independentsector.org/news-post/value-volunteer-time/</a>

Lerner, R.M., Lerner, J.V. (2011). The positive development of youth: Report of the findings from the first seven years of the 4-H Study of Positive Youth Development. Retrieved from <a href="http://www.4-horg/about/youth-development-research/">http://www.4-horg/about/youth-development-research/</a>

Lerner, R.M., Lerner, J. V. (2008). 4-H study of positive youth development. Boston, MA: Tufts University

National Association of College and University Business Officers (2012). Lifetime earnings: College graduates still earn more. Retrieved from http://www.nacubo.org/Research/Research News/Lifetime Earnings College Graduates Still Earn More.html















# Agriculture—Partners in Pasture Pat Miller, Agronomy Specialist (Vernon County)

Plant production is economically important to the Bates County area, whether it is crop, forage or commercial horticulture production. As agronomy specialist, Miller educates plant producers through workshops, one-on-one consultations, newsletters, traditional media and social media.

Number of Bates County residents served	The group usually has about 20 in attendance and meets on farms in a six- county area.
Total Hours of Collective Workshop Participation in 2017	NA
What Did They Learn?	Discuss soil and crop/forage management; identify components of pasture production; and generate methods and procedures to improve pastures in our county.
What Action Did They Take?	The group is now meeting every other month in the west central Missouri area during the growing season, with the potluck meetings being hosted by various members.
How Does This Work Make Bates County and Missouri Better?	Provides social and educational opportunities to improve pasture quality.

# Agriculture—Pesticide Applicators Pat Miller, Agronomy Specialist (Vernon County)

Number of Bates County residents served	Forty-six ag producers attended in Bates County.
Total Hours of Collective Workshop Participation in 2017	NA
What Did They Learn?	Participants learned safe methods of pesticide application from Pat Miller, resulting in reduced environmental and personal hazards.
What Action Did They Take?	This training provides participants a private applicator license to purchase restricted-use pesticides.
How Does This Work Make Bates County and Missouri Better?	Provides growers with the required knowledge, skill and ability to properly apply pesticides, including but not limited to: herbicides, fungicides and insecticides.

# Agriculture—Crop Weed Management Meeting Pat Miller, Agronomy Specialist (Vernon County)

Number of Bates County residents served	Ten attended
Total Hours of Collective Workshop Participation in 2017	NA
What Did They Learn?	Management strategies to help control crop weeds.
What Action Did They Take?	Made more effective and safer applications.
How Does This Work Make Bates County and Missouri Better?	Increases ag income and protects the health of ag producers.

# Ag In Focus Newsletter Mailing Pat Miller, Agronomy Specialist (Vernon County)

Number of Bates County residents served	Bates County—222
Total Hours of Collective Workshop Participation in 2017	NA
What Did They Learn?	Improved crop, forage and farm management practices.
What Action Did They Take?	Applied those practices to their operations.
How Does This Work Make Bates County and Missouri Better?	Increases ag income and land productivity.

# Agriculture—Individual Consultations for Crop and Forage Producers, Ag Email Updates and Facebook Page Posts

Pat Miller, Agronomy Specialist (Vernon County)

Number of Bates County residents served	175
Total Hours of Collective Workshop Participation in 2017	NA
What Did They Learn?	Ag pest and management updates and upcoming meeting announcements.
What Action Did They Take?	Attended educational meetings, scouting fields and made informed decisions.
How Does This Work Make Bates County and Missouri Better?	Increases ag income and reduces unnecessary pesticide treatments.

## **Agriculture—Livestock Production Program**

David Hoffman (Cass County)

An all-inclusive program focused on improving livestock production and profitability for producers of beef cattle, swine, small ruminants and equine. Producer contact was via producer meeting, workshop attendance, farm visits, phone conversation and/or email. Adults and youth participation in a wide variety of program efforts including Missouri Show-Me-Select Program, Management Intensive Grazing Schools, On-Farm Performance Testing,4-H and FFA Youth Livestock Projects, and other meeting and workshops and individual consultation. Topics ranged from answering a single question to more in-depth involvement in solving production concerns or management practices. Topics include reproduction management, nutrition, genetic improvement and technology, herd health, carcass quality, animal handling and facilities, show animal management, etc.



## Number of Bates County residents served

156 livestock producers (adult and youth) were in contact with the MU Extension Regional Livestock Specialist regarding their livestock operation in 2017.

#### Total Hours of Collective Workshop Participation in 2017

More than 180 hours of collective time spent attending a workshop or program or visiting with the MU Extension Regional Livestock Specialist.

#### What Did They Learn?

Producers gained knowledge about heifer development through the Show-Me-Select Heifer Program. Via the Beef Cattle ReproGene Conference, producers gained knowledge about estrous synchronization and reproductive management, along with DNA genomic testing of replacement heifers. Producers gained valuable knowledge regarding supplementation of their cattle, rotational grazing, herd health, genetics, and animal handling.

#### What Action Did They Take?

- One cattle producer sold seven head of Show-Me-Select Heifers through the value-added sale at Kingsville, MO for \$14,800 for an average of \$2114/head, compared to non-Show-Me-Select heifers averaging approximately \$1500-1600/head.
- Producers implemented DNA testing of the Angus cattle to improve accuracy of their breeding stock EPDs.
- Producers replaced and/or improved their cattle handling facilities for easier management of the cows and calves.
- Producers able to improve their supplementation strategies in their cowherd for improved reproductive performance in their cows.
- Producers improved their forage utilization through management intensive grazing practices.
- Producers incorporated estrous synchronization protocols and artificial insemination in their cattle operation to increase performance and genetic merit of their herd.
- Producers kept better cowherd performance records and economic records of their operation through the IRM Red Book.
- 4-H and FFA youth improve their clipping and grooming skills for their youth cattle project, enhancing their appearance at the county fair and livestock shows.

#### How Does This Work Make Bates County and Missouri Better?

As livestock producers improve their operation and make management decision to increase profitability, there is more economic activity and development in the rural communities. In addition, the livestock producers are better equipped to utilize their resources and improve the natural resources of the state.

## **Family Nutrition Education Program**

Amanda Ast, Nutrition Program Associate

The Family Nutrition Program (FNP) brought \$9,681,129.00 federal funds to the state of Missouri. These funds were used to provide nutrition education to 838,295 Supplemental Nutrition Assistance Program recipients and eligible citizens of Missouri. There were 3,831,270 educational contacts. This year we had 3,064,781 indirect educational contacts. Indirect contacts are reached through newsletters, health fairs, food pantries and the Show Me Nutrition help line.

Participants in FNP become more aware of nutrition, make healthier meal and snack choices, eat breakfast more often, are more willing to try new foods, increase their physical activity and in general make healthier food choices. Those who practice healthy eating and activity behaviors are more likely to enjoy a high quality of life as an adult and into old age. A healthy labor force is critical to attracting and keeping jobs in Missouri. In addition, this important programming effort serves to reduce healthcare costs over the participant's lifetime, saving taxpayers money in reduced public healthcare benefits and insurance premiums.

In addition to providing nutrition education, in mid-2017, FNEP began partnering with the Supplemental Nutrition Assistance Program (SNAP) Outreach. The NPAs are spending an average of 4 hours per week in providing information and assistance with SNAP applications.

In Bates County, 592 Youth and 5,949 Adults contacts were made for a total of 6,541 contacts. The following is a list of the locations where participants were served in Bates County:

<u>Schools</u> <u>Agencies</u>

Ballard Elementary	Community Food Pantry of Butler
Butler Elementary	Bright Beginnings Learning Center
Hudson Elementary	Adrian Head Start (WCMCAA)
Hume Elementary	Butler Head Start (WCMCAA)
Miami Elementary	Rich Hill Head Start (WCMCAA)
Rich Hill Elementary	Butler Senior Center

In addition to the numbers, Amanda Ast shared this success story demonstrating local impact:

While I was at the Community Food Pantry in Butler a grandmother came up to me and told me that she has been making the Tuna Bean Wrap recipe at home. She had tried the samples I had on one of her shopping days and loved it. She said even her granddaughter loves them and has been taking them for lunch at school!

In summary, it has been a successful year in Bates County for FNP. We look forward in 2018 to more programming opportunities and continued progress in helping to improve the lives of Missouri families. We would like to wish you Happy Holidays and all the best in the New Year.

Thank you,

Michelle Chapman

West Central FNEP Coordinator

Michelle Chapman

## Nutrition and Health Education—Stay Strong Stay Healthy, Level 1

Tammy Roberts, Nutrition and Health Education Specialist

Participants learn 8 exercises designed to improve their strength, flexibility, and balance. These exercises benefit both upper and lower body. Warm-up and cool down stretches complete each class. These exercises help participants build muscle, increase bone density, and improve mental and physical health. The class meets twice weekly to assure that balance, strength and flexibility are improved.

## Number of Bates County residents served

Four sessions were held in 2017 with 16 classes in each session. The classes were held in partnership with Bates County Memorial Hospital. Nine Bates County residents participated.

#### Total Hours of Collective Workshop Participation in 2017

Bates County residents benefitted from 64 hours of Stay Strong Stay Healthy Level 1 participation for a total of 576 educational contacts.

#### What Did They Learn?

The program features exercises using resistance from body weight, hand weights, and ankle weights. Participants learn how to correctly perform exercises to improve balance, strength, and flexibility.

#### What Action Did They Take?

In post evaluation SSSH Fitness Assessments

90% improved or stayed the same in the Chair Stand Test, which assesses lower-body strength and endurance needed for activities such as climbing stairs; walking, and getting up from a seated position

87% improved or stayed the same in the Chair Sit-and-Reach Test, which assesses lower-body flexibility important in joint pain control and needed for activities such as putting on socks and shoes, dressing and using stairs

93% improved or stayed the same in the Back-Scratch Test which assesses upper-body and shoulder flexibility needed for activities such as combing hair, dressing and reaching

90% improved or stayed the same in the 8-Foot Up-&-Go Test which assesses the agility and balance needed for activities such as standing quickly from a seated position and walking

85% improved or stayed the same in the Balance Assessments which indicates reduced risk of falling and continued independent living

"The exercises make me stronger and I can tell my energy level has increased. I look forward to coming to class."

# How Does This Work Make Bates County and Missouri Better?

Participants have improved strength, balance and flexibility, resulting in reduced risk for falls, better overall health, and greater independence. These health benefits decrease the likelihood of a participant entering a nursing home. It also keeps people actively, independently contributing to society longer.

## Nutrition and Health Education—Stay Strong Stay Healthy, Level 2

Tammy Roberts, Nutrition and Health Education Specialist

The program features exercises using resistance from body weight, hand weights, and ankle weights.

In this advanced class, participants learn more strength training exercises for both the upper and lower body. Floor exercises are introduced and a variety of stretching and breathing exercises are utilized during the 16-week session.

## Number of Bates County residents served

Eight sessions were held in 2017 with 16 classes in each session. The classes were held in partnership with Bates County Memorial Hospital and Adrian United Methodist Church. Thirty-two Bates County residents participated.

#### Total Hours of Collective Workshop Participation in 2017

Bates County residents benefitted from 128 hours of Stay Strong Stay Healthy Level 2 participation for a total of 1918 educational contacts.

#### What Did They Learn?

The program features exercises using resistance from body weight, hand weights, and ankle weights.

In this advanced class, participants learn more strength training exercises for both the upper and lower body. Floor exercises are introduced and a variety of stretching and breathing exercises are utilized during the 16-week session.

#### What Action Did They Take?

In post evaluation SSSH Fitness Assessments

92% improved or stayed the same in the Chair Stand Test, which assesses lower-body strength and endurance needed for activities such as climbing stairs; walking, and getting up from a seated position

90% improved or stayed the same in the Chair Sit-and-Reach Test, which assesses lower-body flexibility important in joint pain control and needed for activities such as putting on socks and shoes, dressing and using stairs

98% improved or stayed the same in the Back-Scratch Test which assesses upper-body and shoulder flexibility needed for activities such as combing hair, dressing and reaching

94% improved or stayed the same in the 8-Foot Up-&-Go Test which assesses the agility and balance needed for activities such as standing quickly from a seated position and walking

88% improved or stayed the same in the Balance Assessments which indicates reduced risk of falling and continued independent living

"My doctor wants me to continue taking this class because it helps me stay healthy. I am going to be 90 years old next year and I know this class is why I am doing so well."

# How Does This Work Make Bates County and Missouri Better?

Overall, it improves the quality of life for the people who participate. Exercise decreases the physical burden of aging and enhances physical and emotional well-being. When people feel stronger, they gain confidence in their abilities and become more active at home and in the community. When citizens are active and healthy they are better able to contribute to society.

## **Nutrition and Health Education—Diabetes Self-Management**

Tammy Roberts, Nutrition and Health Education Specialist

Diabetes Self-Management is an evidence-based program developed by Stanford University. Through discussion and brainstorming, participants learn more about their chronic condition and how to manage the many facets of the disease.

## Number of Bates County residents served

One session was held in 2017 with 6 classes in the session. The classes were held in partnership with Bates County Memorial Hospital. Eight Bates County residents participated.

#### Total Hours of Collective Workshop Participation in 2017

Eight Bates County residents benefitted from 14 hours of Diabetes Self-Management participation for a total of 49 educational contacts.

#### What Did They Learn?

Through discussion, brain storming, and class activities, participants identify a set of problems that are common with people who have diabetes. The diabetes self-management tool box is utilized to help participants manage diabetes. Through the diabetes tool box, participants learn more about meal planning, managing medications, physical activity, managing blood sugar levels, developing problem solving skills, and effective communication with medical providers.

#### What Action Did They Take?

Each week, participants set self-care goals, called action plans, related to diabetes to improve their health and well-being. The following week, they report back on the successes and challenges of their action plan. This action plan process sets the stage so they can continue setting and reaching goals after the class ends. Many people increased physical activity during the class. Others improved their diet.

100% would recommend the program to others

80% had increased knowledge and skills as a result of the program

80% said they were better prepared to take care of themselves and their health

80% people said they were managing their chronic condition better

"I have become a label reader and have learned to watch salt intake. I lost 12 pounds doing action plans."

"I am better prepared to work with my healthcare provider."

# How Does This Work Make Bates County and Missouri Better?

When diabetes is well managed, there is improved health-related quality of life. Well controlled diabetes results in fewer medical expenses contributing to the economic health of the family and community.

## **Nutrition and Health Education—Cooking Matters for Kids**

Tammy Roberts, Nutrition and Health Education Specialist

Cooking Matters for Kids is an evidence-based program taught in partnership with Operation Food Search and the SNAP Education Program. Recipes were developed by chefs and designed to be healthy, inexpensive, and easy to prepare.

## Number of Bates County residents served

One session was held in 2017 with 6 classes in the session. The classes were held in partnership with Bates County Youth Advocacy Council. Fourteen Bates County youth participated.

#### Total Hours of Collective Workshop Participation in 2017

Fourteen Bates County youth benefitted from 12 hours of Cooking Matters for Kids participation with a total of 84 educational contacts.

#### What Did They Learn?

Children learn food preparation basics such as safe knife handling, food safety, measuring food, and how to read a recipe. Children learn nutrition principles as they prepare and sample three recipes in each of the six classes. Overall, they learn that "healthy" can taste really good and that it is easy and inexpensive to prepare healthy food

#### What Action Did They Take?

Children reported that they had prepared some of the recipes prepared in class at home. They were excited they had many of the ingredients at home that we used in class.

"I made the turkey tacos for my dad and he liked them!"

"My aunt didn't think I could make pizza all by myself but I showed her how we made skillet pizza."

# How Does This Work Make Bates County and Missouri Better?

It is a widely accepted fact that cooking is becoming a lost art. Preparing your own food has many advantages, not the least of which you choose your own ingredients which can make for a nutrient packed meal. When children learn cooking basics, it empowers them to contribute to their own health and well-being.

## **Business Development Program (BDP)**

Jackie Rasmussen, Business Development & International Trade Specialist

## Number of Bates County residents served

NA

#### Total Hours of Collective Workshop Participation in 2017

For the 17 counties that comprise the West Central Region, MU Extension Business Development Program counselors provided start-up and management counseling, training and other assistance to 2,107 individuals and companies.

Individuals received assistance in topics ranging from:

- Starting A Business
- Business & Strategic Planning
- Marketing
- Management
- Doing Business with the Government
- · Understanding Financial Statements, and
- International Trade

Several businesses also worked with the International Trade Center to complete customized global market research projects that provided them with assistance to identify new international market with potential for their businesses.

#### What Did They Learn?

Businesses participating in counseling or training sessions learned:

- Effective tips and techniques to successfully start, manage or grow their businesses
- Additional resources and business assistance services that exist that can be accessed to support business development & growth – such as the Missouri Small Business & Technology Development Centers, Missouri Procurement Technical Assistance Centers, the Mid-America Trade Adjustment Center and Workforce Programs.

#### What Action Did They Take?

As a result of assistance provided by the MU Extension Business Development program businesses in the WC Region in FY2017 generated the following economic impact:

- · Started 12 new businesses
- Created or retained 617 new jobs
- Generated sales increases of \$34,480,897
- Received government contract awards of \$16,098,297
- Secured new investment (loans or owner equity) of \$9,204,407
- Acquired Assets worth \$1,137,002





Pictured: MU College of Business student interns worked with MU International Trade Center & MU Extension to complete global market research for 15 Missouri business located across the state in 2017. Woodland, located in Linn Creek, MO (Camden County) was one of the WC Region businesses assisted.

#### How Does This Work Make Bates County and Missouri Better?

As entrepreneurs and innovators, Missouri's small businesses are becoming a more diverse group that continues to make the state's economy productive. There are approximately 500,000 small businesses in Missouri. Nearly 98 percent of all businesses with employees are categorized as small businesses. In assisting the owners and managers of those businesses, MU Extension contributes to the county's economic development through growth in jobs, sales, innovation, technology development and commercialization.

Across the state of Missouri, the total impact for all businesses assisted by the MO Business Development Program was:

- 259 new businesses
- 3,106 new jobs
- 3,675 jobs retained
- \$478,772,408 in increased sales
- \$7,622,000 in government contracts

- \$91,002,145 in loans and investments in business
- 3,458 clients/companies receiving at total of 25,110 hours of business counseling 10,685 business training/conference attendee

## **Business Development Program (BDP)**

Kelly Asbury, MO SBTDC—State Fair Community College, Sedalia

As entrepreneurs and innovators, Missouri's small businesses are becoming a more diverse group that continues to make the state's economy productive. There are approximately 500,000 small businesses in Missouri. Nearly 98 percent of all businesses with employees are categorized as small businesses. In assisting the owners and managers of those businesses, MU Extension contributes to a county's economic development through growth in jobs, sales, innovation, technology development and commercialization.

During 2017 for the 17 counties that comprise the West Central Region, business counselors provided business start-up and management counseling, training, and other assistance to 2,107 people and their companies. In addition, entrepreneurs and business owners in those counties reported the following economic impact and activity as a result of the services provided by the MU Extension Business Development Program:

•	New businesses	12
•	Created or retained jobs	617
•	Sales increases	\$34,480,897
•	Government contracts	\$16,098,297
•	Investments (loans or owners' equity)	\$9,204,407
•	Clients/companies receiving business counseling	290
•	Business training attendees and conference participants	1,817

Overall, the University of Missouri's Business Development Programs (BDP) served 14,143 people and their businesses state-wide. The total impact for all businesses assisted by the BDP was:

	New businesses	259
•	New jobs	3,106
•	Retained jobs	3,675
•	Sales increases	\$478,772,408
•	Government contracts	\$7,622,000
•	Loans and investments in business	\$91,002,145
•	Investment in commercialization:	
•	Clients/companies receiving business counseling	3,458
•	Business training attendees and conference participants	10,685

For assistance with starting, managing or growing your business— www.missouribusiness.net Contact: Kelly Asbury

MO SBTDC - State Fair Community College, Sedalia

Ph. (660) 596-7350 kasbury1@sfccmo.edu

## **SET- Stronger Economies Together**

Stronger Economies Together (SET) enables communities and counties in rural America to work together in developing and implementing an economic development blueprint for their multi-county region that strategically builds on the current and emerging economic strengths of that region. BENEFITS OF SET: • Step-by-step coaching to guide the design and implementation of a practical and viable regional economic development plan • In-depth data tailored to the region, describing its current and emerging clusters, comparative economic advantages, and detailed demographic and socioeconomic information •

Creating, attracting and retaining jobs as a single rural county in isolation from other nearby counties is becoming increasingly ineffective. In today's global marketplace, economic development progress is more likely to be realized when rural and metro counties work together as a region to assess their resources and then design and implement plans that build on their assets and comparative economic strengths. Launched in 2010 by USDA Rural Development and the nation's four Regional Rural Development Centers and their land-grant university partners, this exciting initiative is now in place in 94 regions in 32 states.

#### Kaysinger Basin Economic Development Planning Region- Benton, Hickory, Henry, St. Clair, Cedar, Bates, Vernon

Regional teams involved in the SET program are introduced to a wealth of information and "hands-on" activities that are designed to help strengthen their ability to successfully plan and implement a high quality regional plan. Topics introduced in the SET sessions include:

- Conducting a Regional Civic Forum
- Exploration of Regional Data
- Evidence Based Planning
- Connecting Capitals
- Finalizing a High Quality Regional Plan

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## **MU Extension Continuing Education**

#### University of Missouri (MU) Conference Office

The MU Conference Office provides full-service meeting management for a variety of noncredit educational programs. In FY 2017, the MU Conference Office organized 72 conferences for more than 20,000 people in teacher education in math, science and writing; crop management and agricultural lending, as well as statewide youth leadership programs, generating \$3.2 million in revenue. *muconf.missouri.edu* 

#### Fire and Rescue Training Institute (MU FRTI)

In FY 2017, MU FRTI celebrated its 85<sup>th</sup> anniversary of providing continuing professional education and training to Missouri's fire service and emergency response personnel. In addition to fire training, courses prepare firefighters for medical emergencies, hazardous materials response and disaster preparedness and mitigation. In FY 2017, MU FRTI trained 11,319 firefighters and emergency responders from 932 departments, organizations and agencies throughout all 114 Missouri counties. *mufrti.org* 

#### Law Enforcement Training Institute (LETI)

LETI provides training and education for Missouri's 17,000 personnel and police recruits and presentations to community and civic groups, as well as collaborative programs with agencies from 31 states. In FY 2017, LETI reached nearly 2,000 police and emergency responders. With MU's Human Environmental Sciences department, LETI piloted Taking Care of You and Mental Health First Aid for Law Enforcement, helping participants better understand mental illness and how it impacts their work. Other programs include advanced animal cruelty investigations training and armed intruder and personal safety response. Students receive over 700 hours of basic training and certification, with other topics and certifications like Crisis Intervention Team Training available.

#### Missouri Training Institute

The Missouri Training Institute provides continuing education programs in business, as well as customized training programs and consulting services for business and industry and public, nonprofit and educational organizations and institutions. In FY 2017, 10,630 people enrolled in the institute's 371 programs that cover diverse business practices, such as human resource management, team building, decision-making, strategic planning and leadership. *mti.missouri.edu* 

#### **MU Nursing Outreach**

Nursing Outreach serves mainly rural health-care workers with high-quality, affordable continuing education programs using face-to-face and online delivery methods; 92 percent live outside the St. Louis and Kansas City metro areas. In FY 2017, nurses from 77 Missouri counties and the city of St. Louis attended continuing education programs. Another 867 nurses and 1,986 health care professionals — including social workers, nursing home administrators and psychologists — were served through multidisciplinary programs. *nursingoutreach.missouri.edu* 

# Center for Continuing Medical Education and Physician Lifelong Learning (CME/PLL)

CME/PLL serves MU Extension and the MU School of Medicine by educating physicians and other health care providers to improve the standard of care in Missouri. In FY 2017, CME/PLL offered 1,678 noncredit programs, courses and activities, serving 27,345 people, as well as 14 accredited medical conferences, including the annual Missouri Telehealth Network Summit on trends in this emerging healthcare arena; an Ellis Fischel Cancer Symposium on holistic approaches to cancer care; and one of the world's largest multidisciplinary conferences on dialysis. CME/PLL also provided online training for 6,400 state mandated child protection reporters in 20 occupational fields.

#### medicine.missouri.edu/cme

# **Veterinary Medical Extension and Continuing Education** (VMECE)

Veterinary Medical Extension provides information and consultation to veterinarians and livestock owners on issues such as disease risks, rising input costs and regulations that impact farming operations. In FY 2017, VMECE provided 17 continuing education events for veterinarians needing credit to renew their licenses. Twelve events addressed antibiotic label changes that went into effect on January 1, 2017, and how to write a veterinary feed directive. The rest dealt with preventing and responding to disease outbreaks in Missouri livestock operations. The VMECE team also presented at more than 40 meetings across the state, educating animal owners about the antibiotic label changes. VMECE also taught food animal production medicine to MU College of Veterinary Medicine students and collaborated in research that addressed bovine reproduction. *vmth.missouri.edu* 

#### **Labor Education**

The Labor Education Program works with members and leaders of workplace-based organizations across Missouri to help them develop skills, act effectively in the workplace and be informed and active participants in their communities. In FY 2017, the program offered 35 courses and conferences to 952 participants, most of whom are leaders of organizations representing the economic interests of more than 20,000 working people in Missouri and surrounding states.

labored.missouri.edu

#### 2018 IMPACT DATA

## **Bates County**



### UM System Footprint in the County in 2017



#### Students

#### 65 County students

- 58 Undergraduates
- 7 Graduates
- 31 Full-time students
- 34 Part-time students
- 11 Pell grant recipients (aid year '17)



#### Employees and retirees

#### 12 people employed by UM

- 11 Campus
- 1 UM Health Care

5 UM retirees and beneficiaries

UM salary and retirement income: \$301.531

UM state tax revenue: \$8,796

UM federal tax revenue: \$46,682



#### Alumni

#### Selected school alumni

- 3 Medicine
- 8 Nursing
- 8 Health Professions
- 3 Dentistry
- 6 Pharmacy
- 6 Veterinary Medicine
- 73 Agriculture
- 26 Engineering
- 11 Law

#### Alumni teaching K-12

- 26 teachers
- 11% of all county teachers
- 5 principals and administrators
- 31% of all county principals and administrators

# 1

#### Breakdown by campus

#### MU

- 15 students
- 174 alumni
- 7 employees

#### UMKC

- 38 students
- 82 alumni
- 3 employees

#### Missouri S&T

- 12 students
- 22 alumni
- 1 employees

#### UMSI

- 0 students
- 1 alumni
- 0 employees



#### County population: 16,643



#### Health care

- 48 patients seen at UM Health Care, with \$3,681 of uncompensated care
- 45 patients seen at the UMKC School of Dentistry with an average of \$54 per patient in uncompensated care
- University of Missouri Health Care's Missouri Telehealth Network provided services to 47 patients at 1 site

#### Extension

- 12,185 total educational contacts from MU Extension to residents of county, including:
  - 14 contacts related to productive farming, better gardening, and managing natural resources
  - 12,090 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development
  - 61 contacts related to starting businesses, developing community leaders, or renewing the local economy



### Properties and offices

MU Extension in: Bates County

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#### 2018 IMPACT DATA

## **Bates County**



#### **UM System Statewide Footprint**

#### Economic and community development highlights

 Business development specialists worked with small businesses and entrepreneurs statewide to create 8,149 jobs.



For every dollar invested in University of Missouri Extension \$11 of public value is returned; generating \$945 million in direct and economic benefit to Missouri in 2016.

 Between FY2011 and FY2016, UM System brought Missouri more than \$1.1 billion in federal and private research funds, funded primarily from outside the state but spent within the state.



In 2017, the university was issued 49 patents and filed 74 patent applications.

 In 2017, the UM System construction projects resulted in a total investment in the state of \$136.7 million.



In FY 2017, Missouri Telehealth Network brought the expertise of University of Missouri Health Care physicians to underserved areas — 2,270 patient consults in 42 counties.

#### Education and training provided



42,576 police, fire fighters, nurses, and doctors attending continuing education

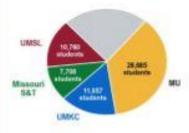


Agriculture and natural resource programs served 94,830 farmers and related businesses



190,300 youths served in 4-H clubs, schools, camps and other programs

#### Education highlights



77% of the UM System's 72,877 students receive some financial aid totaling \$910.6 million.

- UM System's MOREnet (Missouri Research and Education Network) provides internet connectivity, access, support and training to 59 higher education institutions (267,000 students), 502 K-12 school districts (828,900 students) and 116 public libraries (serving nearly 5 million Missourians) in 2016.
- UM System awarded 54% of Missouri's 32,575 bachelor's or higher degrees from four-year public institutions in academic year 2015-2016.
- In 2017, UM System's \$34.5 million in National Science Foundation (NSF) grants represented 97% of all NSF grants made to Missouri public universities.



The cost of supporting full-time students in the UM System is 27% less than peer institutions.

### Supporting the University of Missouri is an investment in the future of Missouri.

The university advances Missouri citizens and communities through its mission of teaching, research, public service, and economic development across our four campuses and University of Missouri Extension.

Prepared in December 2017, based on the best available and most recent data. Data Sources include: Missouri Office of Administration • UM IR • Office of Social and Economic Data Analysis (OSEDA) Center for Applied Research and Engagement Systems (CARES) • MIU • UMKC • Missouri S&T • UMSL • UM System • UM Health Care • MU Extension US Census Bureau • US Dept. of Health and Human Services • National Science Foundation

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